AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph starting on page 9, line 5, as follows:

In further embodiments of the present invention, two or more nodes of the peer-to-peer network may be grouped together and the network of groups modelled on a sub-network of the original peer-to-peer network that is isomorphic to the grouped network. By grouping the network nodes together so that the grouped network is isomorphic, or topologically identical, to the sub-network on which the self-modelling is to be executed, the topological identity between the neural network and the network that is being modelled is maintained. This is illustrated in Figures 3a and 3b 6a and 6b. Figure 3a 6a schematically illustrates the same peer-to-peer network as shown in Figure 1. For the sake of clarity, each node is uniquely numbered. A first set of the network nodes, numbered 10-12, have been grouped together in a first group 6, whilst a second set of network nodes, numbered 13 and 14, have also been grouped together in a further group 8. This is schematically illustrated in Figure 6a. The grouped nodes 6, 8 are represented in Figure 6b as single nodes together with their connections to the remaining nodes, numbered 15 and 16, of the original peer-to-peer network. It can be seen that the grouped network shown in Figure 6b is isomorphic to the group of four original network nodes 12, 14, 15 and 16. Connections between individual nodes within a group, for example between the nodes numbered 10 and 11, are internalised within the node 6 of Figure 6b, whilst other interconnections such as those between nodes 10 and 13, 10 and 14 or 12 and 14 are represented by the single interconnection between grouped nodes 6 and 8. It therefore becomes possible to model the clumped network illustrated in Figure 6b using just those four nodes on the original peer-to-peer network.

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